

TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL

NASA/GODDARD SPACE FLIGHT CENTER

Page 1 of 4

REQUEST FOR TASK PLAN / TASK ORDER

| | | | |
|-----------------|------------------------------------|------------------|------------|
| CONTRACTOR | CONTRACT NO./TASK NO. | JOB ORDER NUMBER | APPROP. FY |
| QSS Group, Inc. | NAS5- 99124 TASK NO. 389 AMENDMENT | 415-616-33-91-89 | 99 |

TASK TITLE: (NTE 80 characters; include Project name)

GOES Project Mission Operations Services -- GOES I-M

APPROVALS: (Type or print name and sign)

| | | | | |
|--|------------------------------------|----------|-----------------|--------------|
| ASSISTANT TECHNICAL REPRESENTATIVE (OR TASK MONITOR) | DATE | ORG CODE | MAIL CODE | PHONE |
| William Lebar <i>William Lebar</i> | 9/15/00 | 415 | 415 | 301-286-3004 |
| BRANCH HEAD | DATE | CODE | | PHONE |
| Martin A. Davis <i>Martin A. Davis</i> | 9/19/00 | | 415 | 301-286-8998 |
| CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE (COTR) | DATE | CODE | | PHONE |
| for Robert S. Lebar, Jr. <i>Robert S. Lebar, Jr.</i> | 9/25/00 | | 568 | 301-286-6588 |
| FLIGHT HARDWARE, CRITICAL GSE OR SOFTWARE? (If YES, NEED CODE 303 CONCURRENCE NEXT BLOCK) | CONTRACTING OFFICER'S QUALITY REP. | | DESIGNATED FAM: | |
| [X] NO [] YES | | | | |

The contractor shall identify and explain the reason for any deviations, exceptions, or conditional assumptions taken with respect to this Task Order or to any of the technical requirements of the Task Order Statement of Work and related specifications. The contractor shall complete and submit the required Reps and Certs.

(To be completed by Contracting Officer)

C.O. Requested Quote on:

Date:

Contractor will develop specification or statement of work under this task for a future procurement. [X] NO [] YES

Flight hardware will be shipped to GSFC for testing prior to final delivery. [] NO [] YES [X] N/A

Government Furnished Property/Facilities: [] NO [X] YES -- SEE LIST OF GFP (offsite only) / FACILITIES (onsite only)

Onsite Performance: [X] NO [] YES If yes: [] TOTAL [] PARTIAL If partial, indicate onsite work in SOW by asterisk (*)

Surveillance Plan Attached: [X] NO [] YES

Highlighted Contract Clauses: (to be completed by Contracting Officer)

Per Clause H.14, Task Ordering Procedure, subparagraph (f), the effective date of this task order shall be 10/1/00.

INCENTIVE FEE STRUCTURE(check one)

(See Contract NAS5-99124, Attachment K, Incentive Fee Plan)

| | X No. 1 | No. 2 | No. 3 | No. 4 | No. 5 |
|-----------|---------|-------|-------|-------|-------|
| Cost | 10% | 50% | 25% | 25% | % |
| Schedule | 15% | 25% | 25% | 50% | % |
| Technical | 75% | 25% | 50% | 25% | % |

(To be completed by Contracting Officer)

The target cost of this task order is \$ 1,573,520 .

The target fee of this task order is \$ 102,279 .

The total target cost and target fee of this task order as contemplated by the Incentive Fee clause of this contract is \$ 1,675,799 .

The maximum fee is \$ 149,485 .

The minimum fee is \$0.

AUTHORIZED SIGNATURE:

THIS TASK ASSIGNMENT IS ISSUED ACCORDING TO THE CONTRACT CLAUSE "TASK ASSIGNMENTS AND REPORTS"

Therese J. Becker

SIGNATURE OF CONTRACTING OFFICER

10/13/00

DATE

Therese J. Becker

TYPED NAME OF CONTRACTING OFFICER

CONTRACTOR'S ACCEPTANCE:

AUTHORIZED SIGNATURE

DATE

REQUEST FOR TASK PLAN / TASK ORDER

| CONTRACTOR | CONTRACT NO./TASK NO. | TASK NO. | AMENDMENT |
|-----------------|-----------------------|----------|-----------|
| QSS Group, Inc. | NAS5- 99124 | 389 | |

Applicable paragraphs from contract Statement of Work: Function 2 I

STATEMENT OF WORK: (Continue on blank paper if additional space is required)

The contractor shall establish a Mission Operations Support Team (MOST) at an offsite facility to provide services to the GOES Project at the NASA/Goddard Space Flight Center in conducting the GOES I-M Missions. The MOST shall provide expertise to perform systems engineering services and shall use the computing resources of the Satellite Operations Control Center at NOAA in Suitland, Maryland, to support mission operations. The task activities are described below:

Mission Operations Services -- The MOST shall provide personnel and facilities to perform the following functions. Some travel is required to the spacecraft contractor's plant for conducting/participating in reviews, tests, etc.

1. Launch Preparation and Operations:

- Develop and maintain Telemetry and Command database.
- Develop and maintain Command procedures.
- Develop and maintain Operations Scripts.
- Develop and maintain Contingency Operations Procedures.
- Develop Post-Launch Test (PLT) plan and test procedures.

APPLICABLE DOCUMENTS:

None.

TASK END DATE: 9/30/01

MILESTONES/DELIVERABLES AND DATES:

GOES-M End-to-End Test #3:

| | |
|------------------------------|----------------|
| ETE Test Planning/Scheduling | Test - 30 days |
| ETE Test Conduct | 10/3/00 |
| ETE Test Report | Test + 30 days |

GOES-M End-to-End Test #4:

| | |
|------------------------------|----------------|
| ETE Test Planning/Scheduling | Test - 30 days |
| ETE Test Conduct | 12/1/00 |
| ETE Test Report | Test + 30 days |

GOES-M End-to-End Test #5:

| | |
|------------------------------|----------------|
| ETE Test Planning/Scheduling | Test - 30 days |
| ETE Test Conduct | 4/1/01 |
| ETE Test Report | Test + 30 days |

GOES-M Post-Launch Test

| | |
|-------------------------|----------------------------|
| PLT Planning/Scheduling | Launch - 90 days |
| Test Conduct | Launch to Launch + 90 days |
| Test Report | Test end + 30 days |

Technical Progress Report: Monthly; 15th of the month

Travel/Trip Status Reports: 5 days after completion of trip

PERFORMANCE STANDARDS:

| | |
|-------------------|--|
| Schedule: | On-time delivery/completion of the above |
| Technical: | ATR's acceptance of the above |

FINAL DELIVERY DESTINATION (NAME, BLDG, ROOM):

William Lebar, building 6, room W229

REQUEST FOR TASK PLAN / TASK ORDER

| CONTRACTOR | CONTRACT NO. / TASK NO. | TASK NO. | AMENDMENT |
|-----------------|-------------------------|------------|-----------|
| QSS Group, Inc. | NAS5- 99124 | 389 | |

STATEMENT OF WORK: (Continued)

- Plan and conduct mission simulations, rehearsals and training.
- Provide engineering services in conducting orbit raising operations.
- Provide around-the-clock engineering services in monitoring spacecraft health and safety Provide engineering services in conducting PLT and test data analysis.

2. Spacecraft and Ground System Testing:

- Plan and conduct ground system End-to-end (ETE) tests with the spacecraft using the NOAA SOCC to send commands and process telemetry.
- Provide services to the Mission Readiness Manager in the coordination of resources (i.e., Ground Network (GN), NOAA ground systems, and SOCC) and tests required for Integration Testing (I&T) network interface, testing, compatibility testing, network proficiency testing and ETE testing.
- Provide ground system requirements, assist in validating changes to the NOAA SOCC ground systems.

3. On-Orbit Engineering Services:

- Participate with NOAA on special event operations, station keeping, and battery reconditioning.
- Participate in real-time anomaly investigation and resolution on operational GOES spacecraft.
- Analyze engineering trending data and document analysis results, as well as any anomalous phenomena.

4. System Maintenance and Configuration Management:

- Provide enhancement and maintenance effort on the GOES High-fidelity Operations Simulator Tool (GHOST), High-fidelity Flight Software Simulator, Telemetry and Command Database Tool, Script Generator, Graphic Timeline Tool and other mission planning tools.
- Provide enhancement and maintenance effort on the MOST Local Area Network (LAN), servers and nodes.
- Provide CM effort on all systems, LAN, databases, command procedures and scripts.

5. Operations Reviews and Working Groups Services/Coordination:

- Participate in and coordinate MOST inputs to Mission Readiness Working Group (MRWG).
- Participate in and coordinate MOST inputs to Flight Operations Review (FOR).
- Participate in and coordinate MOST inputs to Operations Readiness Review (ORR).
- Participate in and coordinate MOST inputs to External Independent Readiness Review (EIRR).
- Participate in and coordinate MOST inputs to Network Operations Working Groups (NOWG).
- Participate in and coordinate MOST inputs to Mission Operations Working Groups (MOWG).
- Participate in and coordinate MOST inputs for all other reviews/working groups as needed.

6. Documentation Services:

- Produce and deliver PLT Plan and PLT Report.
- Produce and deliver mission operations procedures.
- Produce and deliver operations review packages.
- Produce and deliver change pages, as needed, to the user's guides and programmer's maintenance manuals.

REQUEST FOR TASK PLAN / TASK ORDER

| CONTRACTOR | CONTRACT NO./TASK NO. | TASK NO. | AMENDMENT |
|-----------------|-----------------------|------------|-----------|
| QSS Group, Inc. | NAS5- 99124 | 389 | |

PERFORMANCE SPECIFICATIONS:

End-to-End #3: ETE Pre-Test Planning/Scheduling:

Establish test objectives/requirements to be met
Establish schedule for meeting objectives/requirements
Establish verification criteria

ETE Test Conduct: Conduct test in accordance with test plan.

ETE Test Report:

Report detailing test results, discrepancies noted, and recommended action for resolution of noted discrepancies including schedule

End-to-End #4: ETE Pre-Test Planning/Scheduling:

Establish test objectives/requirements to be met
Establish schedule for meeting objectives/requirements
Establish verification criteria

ETE Test Conduct: Conduct test in accordance with test plan.

ETE Test Report:

Report detailing test results, discrepancies noted, and recommended action for resolution of noted discrepancies including schedule

End-to-End #5: ETE Pre-Test Planning/Scheduling:

Establish test objectives/requirements to be met
Establish schedule for meeting objectives/requirements
Establish verification criteria

ETE Test Conduct: Conduct test in accordance with test plan.

ETE Test Report:

Report detailing test results, discrepancies noted, and recommended action for resolution of noted discrepancies including schedule

Post-Launch Test: Pre-Test Planning/Scheduling:

Establish test objectives/requirements to be met
Establish schedule for meeting objectives/requirements
Establish verification criteria

Test Conduct: Conduct test in accordance with test plan.

Test Report:

Report detailing test results, discrepancies noted, and recommended action for resolution of noted discrepancies including schedule

Technical Progress Report: Monthly reports shall contain summary of activities completed during month, planned activities for the next month, problems/issues and recommended action(s). Acceptable performance is that the ATR is satisfied that he is being kept informed of the status of work performed and of issues requiring his attention.

Travel/Trip Status Reports: Travel/Trip reports shall contain summary of activities completed during travel item, problems/issues, and recommended action(s).

Management: Performance will be measured against the following metrics: (1) accomplishment of objectives; (2) clear, incremental progress; (3) responsiveness to issues; (4) efficient and appropriate staffing; and (5) coordination with and good working relationship with ATR and other related contractor efforts, if applicable.